

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[BPHARM 0122]

JANUARY 2022  
(AUGUST 2021 EXAM SESSION)

Sub. Code: 4271

B.PHARMACY DEGREE COURSE (NON-SEMESTER EXAMINATIONS)  
FOURTH (FINAL) YEAR (Regulation 2009-2010)  
PAPER V – MEDICINAL CHEMISTRY - II  
*Q.P. Code : 564271*

**Time: Three hours**

**Answer ALL questions**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. Write notes on Quantitative structure activity relationship models.
2. Write the synthesis and Medicinal uses of following.
  - a. Methyl benzethorium chloride.
  - b. Mercaptopurine.
  - c. Hydralazine HCl.
  - d. Niacin.

**II. Write notes on:**

**(8 x 5 = 40)**

1. Discuss structure activity relationship of sulphonamides.
2. Mechanism of action of alkylating agents.
3. Write note on graph theory involved in drug design.
4. Define combinatorial synthesis and explain about solid phase synthesis.
5. Mechanism of action of ACE inhibitors.
6. Write short note on mechanism based approach in drug design
7. Define and classify antifungals with suitable examples.
8. Write note on tetracycline.

**III. Short answers on:**

**(10 x 2 = 20)**

1. Write the synthesis and uses of Diethylcarbamazine (DEC).
2. Write the synthesis and uses of Isoniazid.
3. Write the synthesis and uses of Benzylbenzoate.
4. Write the synthesis and uses of Sulphacetamide sodium.
5. Define Anti-Thrombolytics.
6. Vasodilators.
7. Define partition co-efficient.
8.  $\beta$ -lactum antibiotics.
9. Write the mechanism of action of macrolides.
10. HMG CoA reductase inhibitors.

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